AMENDMENT TO THE SPECIFICATION

Page 7, please amend the third paragraph as follows:

Variable calibrators of the type suitable for use in extrusion lines are known per se for control of the final diameter in the production of unoriented plastics tube, and typically are capable of up to a few percent variation in the calibrated diameter of the tube, depending on the tube material. Variable calibrators are described in EP1048434 and WO 96/36475. The first referenced is commercially available from ConPro GmbH of Germany. In general these variable calibrators are limited to a small adjustment range suitable for wear and shrinkage compensation. Larger changes as would be suitable for size changes are not possible without producing unacceptable distortion of the outside circumference. However, variable calibrators of higher diameter variation can be used for the orientation process of the present invention, even with some distortion of shape, as the initially calibrated tube will undergo expansion and sizing to its final expanded diameter.

Page 7, please amend the paragraph starting at line 25 and ending on page 8, line 5 as follows:

Fig 2A shows a first step in start-up of the process line, in which the extruder head is started, but no diametrical expansion is carried out. In this step, the downstream expansion plug ~~36~~ 26 is deflated to its minimum diameter. The variable diameter calibrator 13 is adjusted to ~~a~~ produce an adjusted tube diameter sufficiently large for the tube to pass readily over the upstream plug and the deflated downstream plug. Control wheels 25 are moved ~~outwards~~ outward of their operating positions to provide clearance for the larger diameter calibrated extruded tube to pass the upsteam plug 24. Once the leading end of the tube passes through the

expansion zone, the downstream haul-off 34 can be engaged to help pull the tube along the process line.

Page 8, please amend the first full paragraph as follows:

Fig 2B shows the next step in the start-up procedure, in which the diameter of the variable diameter calibrator 13 is reduced to the operating diameter, causing the extruded tube to contact the upstream plug as it passes. Control wheels 25 are moved into their operating positions, urging the tube to maintain a seal against the upstream plug 24 as described above with reference to Fig 1.

Page 8, please amend the third full paragraph as follows:

By employing a variable diameter calibrator in this way in the start-up of the process line, the leading end of the extruded and calibrated tube may be fed over the expansion zone plugs 24 and 26 with little or no frictional engagement, until the downstream haul-off 34 can be engaged with the tube to assist. This start-up procedure also reduces the risk of wear or damage to the downstream plug which may occur during start-up.

Page 8, please amend the last paragraph as follows:

The circumferential draw ratio of the expanded tube is the ratio of the mid-wall circumference of the tube at the variable diameter calibrator 13 to the mid-wall circumference of the final tube after expansion and, as discussed above, is essentially equal to the ratio of the corresponding mid-wall diameters.

Page 9, please amend the second paragraph as follows:

The diameter change may be achieved without change in the extruded diameter by adjusting the variable diameter calibrator 13 ~~diameter~~ in proportion to the increase of expanded diameter. Thus, for a typical circumferential draw ratio of 2:1, a 10mm increase in final diameter of the tube will require approximately a 5mm increase in the adjusted diameter set by the variable diameter calibrator 13.

Page 9, please amend the third paragraph as follows:

For change of final tube diameter, the final sizing sleeve 28 may be replaced with a sizing sleeve of different diameter during operation of the process. Similarly, the upstream and downstream plugs may be replaced with different diameter plugs if required. If necessary, the tube may be cut off upstream of the expansion zone 20 to allow removal and replacement of components without the need to shut down the extruder. The speeds of the upstream and downstream haul-offs 16, 34 are adjusted relative to the extrusion speed, to control the wall thickness of the final product. The invention thus allows the adjustment in diameter to be made while operation of the process line continues, with only a brief interruption to production during the diameter transition, by variation of the variable diameter calibrator ~~diameter~~, rather than an interruption of several hours to shutdown the extruder.

Page 9, please amend the last paragraph as follows:

In an unillustrated variation of Figs 3A and 3B, the process may also be adjusted on the run to effect a change in the class (wall thickness) of the oriented tube produced, while leaving the final outside diameter and circumferential draw ratio unchanged. In this embodiment, a change in wall thickness will change the mid-wall diameter of the expanded tube, even though the outside diameter is unchanged. In order to compensate for this change, the diameter of the

variable diameter calibrator 13 is adjusted to keep the ratio of the mid-wall diameter at the variable diameter calibrator 13 proportional to the final mid-wall diameter.

Page 10, please amend the first paragraph as follows:

For example, a 4mm increase in wall thickness of the finished tube will decrease the mid-wall diameter by 4mm. To maintain a circumferential draw ration of 2:1, the variable diameter calibrator 13 is adjusted to decrease the adjusted diameter of the unexpanded tube by 2mm. The seal between the adjusted diameter tube and the seals of the outer surface of the upstream expansion plug 24 is maintained despite the resultant adjustment of the internal diameter of the tube entering the expansion zone, as the extruded tube stretches down in diameter upstream of the expansion zone and stretches up over the plug 24. Furthermore, the extruded tube is pushed onto the plug by the control wheels 25.